

Date: Thursday, 19/03/2009 11:06:00 AM
 User: Julie Dawson

Process Sheet

Customer : CU-DAR001 Dart Helicopters Services	Drawing Name : LEFT ARM WELDMENT
Job Number : 46588	
Estimate Number : 11871	
P.O. Number :	Part Number : D33549
This Issue : 19/03/2009 S.O. No. : ---	Drawing Number : D3354
Prsht Rev. : NC	Project Number : N/A
First Issue : / / Type : MACHINED PARTS	Drawing Revision : C
Previous Run : 42498	Material :
Written By :	Due Date : 02/04/2009 Qty: 4 Um: Each
Checked & Approved By : <u>JUD 09-03-19</u>	
Comment : est. rev.A 06.01.14 new issue EC rev B 07.03.23 rev B dewg ec	

Additional Product

Job Number:



Seq. #: Machine Or Operation:

Description :

1.0

M1020TR1250W219

Round Tubing 1.250 x .219w

**Comment:** Qty.: 0.2405 f(s)/Unit Total : 0.9618 f(s)

Seamless Round Tubing

AISI 1020 1.25" OD x .219" wall

batch: M119343

R1.500

JP 09/03/22

2.0

LATHE CONV.

CONVENTIONAL LATHE

**Comment:** CONVENTIONAL LATHE

1-Turn as per dwg D3354

2- Deburr

DAN

JP 09/03/23

3.0

MILLING CONV.

CONVENTIONAL MILLING MACHINE

**Comment:** CONVENTIONAL MILLING MACHINE

1-Drill hole, mill flat & c'sink as per dwg D3354

2- Mill angle on end as per dwg D3354

3- Deburr

JP 09/03/23

4.0

QC2

INSPECT PARTS AS THEY COME OFF MACHINE

**Comment:** INSPECT PARTS AS THEY COME OFF MACHINE

JP 09/03/23 (4)

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Date: Thursday, 19/03/2009 11:06:00 AM
User: Julie Dawson

Process Sheet

Customer: CU-DAR001 Dart Helicopters Services

Drawing Name: LEFT ARM WELDMENT

Job Number: 46588

Part Number: D33549

Job Number:



Seq. #:

Machine Or Operation:

Description :

5.0

QC8

SECOND CHECK



Comment: SECOND CHECK

SP 09/03/23

6.0

PACKAGING 1

PACKAGING RESOURCE #1



Comment: PACKAGING RESOURCE #1

Identify and Stock

Location: _____

Carl L.

SS 09/03/24 (4)

7.0

QC21

FINAL INSPECTION/W/O RELEASE



Comment: FINAL INSPECTION/W/O RELEASE

09/03/24

Job Completion



CMF 09-03-24


W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

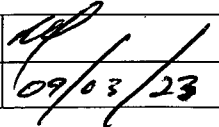
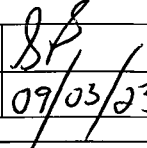
NOTE: Date & initial all entries



DART AEROSPACE LTD		Work Order: 46588
Description: Handle Socket		Part Number: D3354-9
Inspection Dwg: D3354	Rev: 	Page 1 of 1

FIRST ARTICLE INSPECTION CHECKLIST

☒ First Article ☐ Prototype

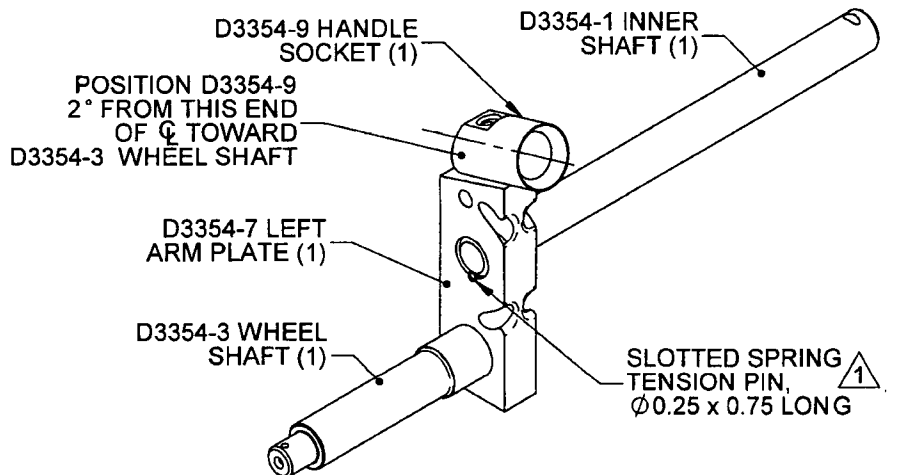
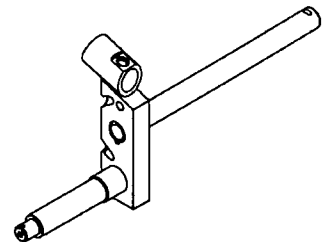
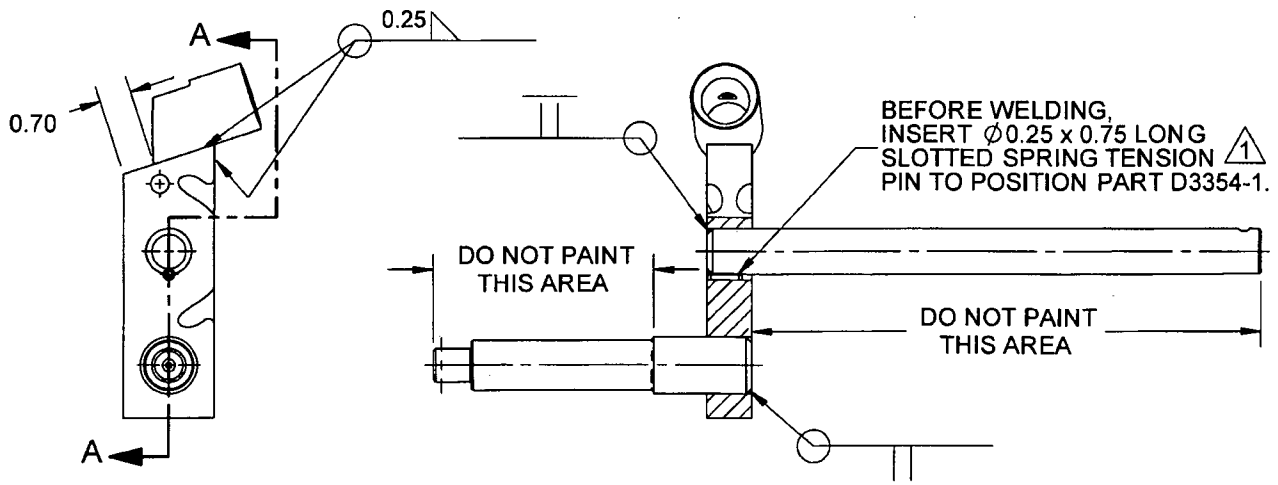
Drawing Dimension	Tolerance	Actual Dimension	Accept	Reject	Method of Inspection	Comments
Ø1.50	+0.012/-0.001	1.504				
Ø1.062	+0.012/-0.001	1.062				
0.219 Ref	+/-0.010	.219				
2.50	+/-0.030	2.50				
0.32 Ref	+/-0.030	.32				
Ø1.437	+0.012/-0.001	1.437				
30°	+/-0.5°	30°				
0.86	+/-0.030	.856				
0.110	+/-0.010	.112				
100°	+/-0.5°	100°				
18°	+/-0.5°	18°				
R0.06	+/-0.030	R0.06				
0.78 Ref	+/-0.030	.800				
0.43	+/-0.030	.43				
Ø0.397	+0.006/-0.001	.399				
Ø0.550	+0.008/-0.001	.550				

Measured by: 	Audited by: 	Prototype Approval:	N/A
Date: 09/03/23	Date: 09/03/23	Date:	N/A

Rev	Date	Change	Revised by	Approved
A	07.04.20	New Issue	KJ/JLM 	

DART**RELEASED**
07/12/07

DESIGN <i>RF</i>	DRAWN BY <i>DC</i>	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
CHECKED <i>lb</i>	APPROVED <i>W</i>	DRAWING NO. LEFT ARM WELDMENT	REV. C SHEET 1 OF 7
DATE 07.12.06		TITLE D3354	SCALE 1:4
REV	DATE	DESCRIPTION	
A	04.12.13	NEW ISSUE	
B	07.02.02	REVISED DIMENSIONS	
C	07.12.06	CHANGE TOLERANCE ON D3354-7 LEFT ARM PLATE HOLE FOR D3354-3 WHEEL SHAFT	

**D3354-041 LEFT ARM WELDMENT****D3354-042 MIRROR ARM WELDMENT****SECTION A-A****NOTES:**

- 1) POSSIBLE SUPPLIER: SPAENAU, P/N TP-134
- 2) WELD PER DART QSI 004
- 3) FINISH: POWDER COAT PAINT FIRE RED (4.3.5.10) PER DART QSI 005 43
- 4) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
- 5) ALL DIMENSIONS ARE IN INCHES
- 6) BREAK ALL SHARP EDGES 0.010 TO 0.020

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WORK ORDER
NO. *2088*

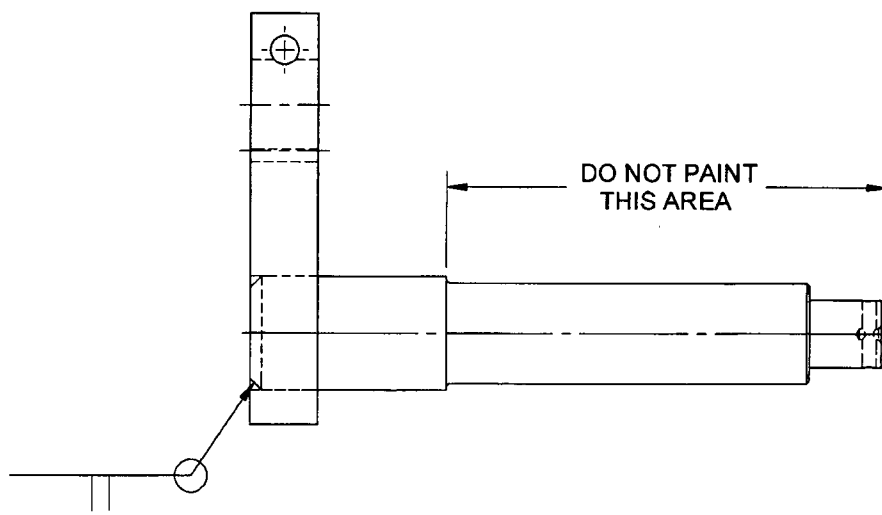
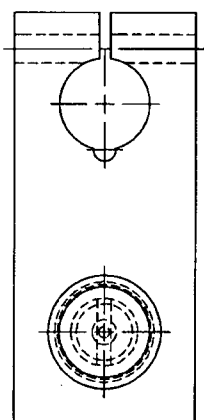
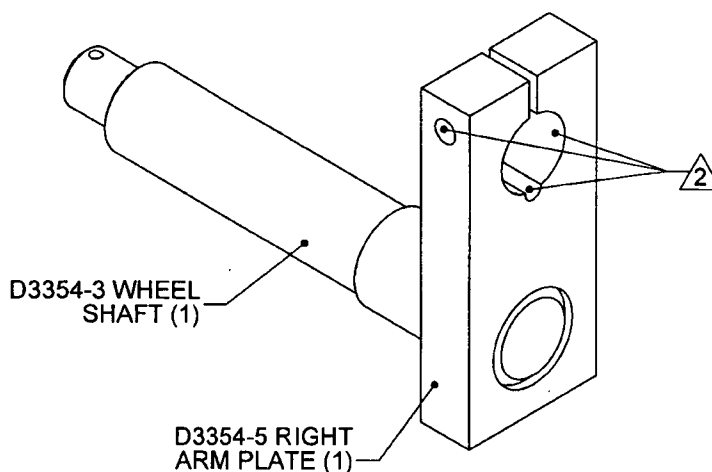
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CHECKED <i>JS</i>	APPROVED <i>MP</i>	DRAWING NO. D3354	REV. C SHEET 2 OF 7
DATE 07.12.06		TITLE LEFT ARM WELDMENT	SCALE 1:2

RELEASED
07/12/07 *WJ*



D3354-043 RIGHT ARM WELDMENT

NOTES:

- 1) WELD PER DART QSI 004
- 2) COVER INSIDE HOLES PRIOR PAINTING
- 3) FINISH: POWDER COAT PAINT FIRE RED (4.3.5.10) PER DART QSI 005 4.3
- 4) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
- 5) ALL DIMENSIONS ARE IN INCHES
- 6) BREAK ALL SHARP EDGES 0.010 TO 0.020

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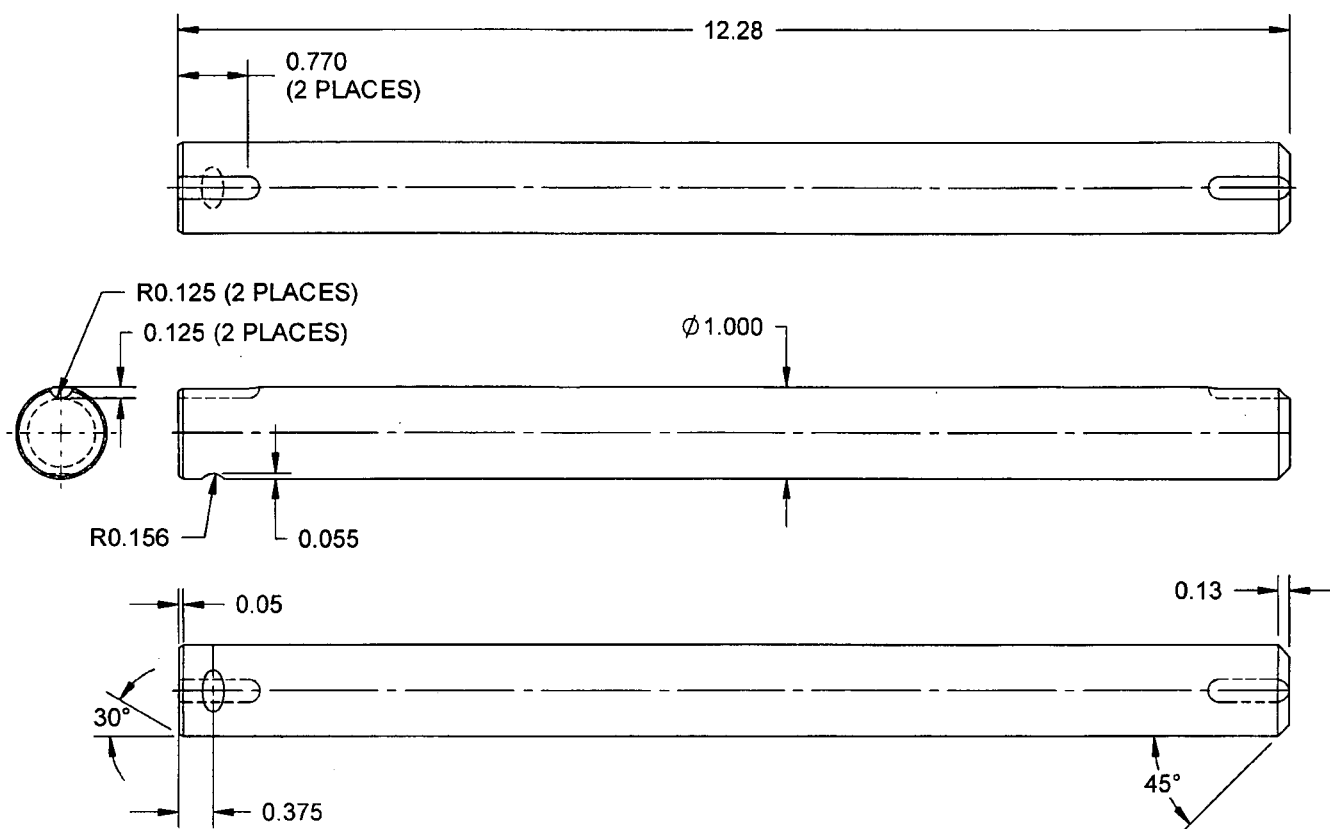
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CHECKED <i>JS</i>	APPROVED <i>MP</i>	DRAWING NO. D3354	REV. C SHEET 3 OF 7
DATE 07.12.06		TITLE LEFT ARM WELDMENT	SCALE 1:2

RELEASED
07/12/07 *W*



D3354-1 INNER SHAFT

NOTES:

- 1) MATERIAL: AISI-4140 OR ASTM A304-02/ A-434-BC/ A193-03 - GRADE-B7/ A29-03/ A322-91 OR UNS#-G41400 ROUND BAR, ϕ 1.250 (REF. DART SPEC. M4140H)
- 2) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
- 3) ALL DIMENSIONS ARE IN INCHES
- 4) BREAK ALL SHARP EDGES 0.005 TO 0.010

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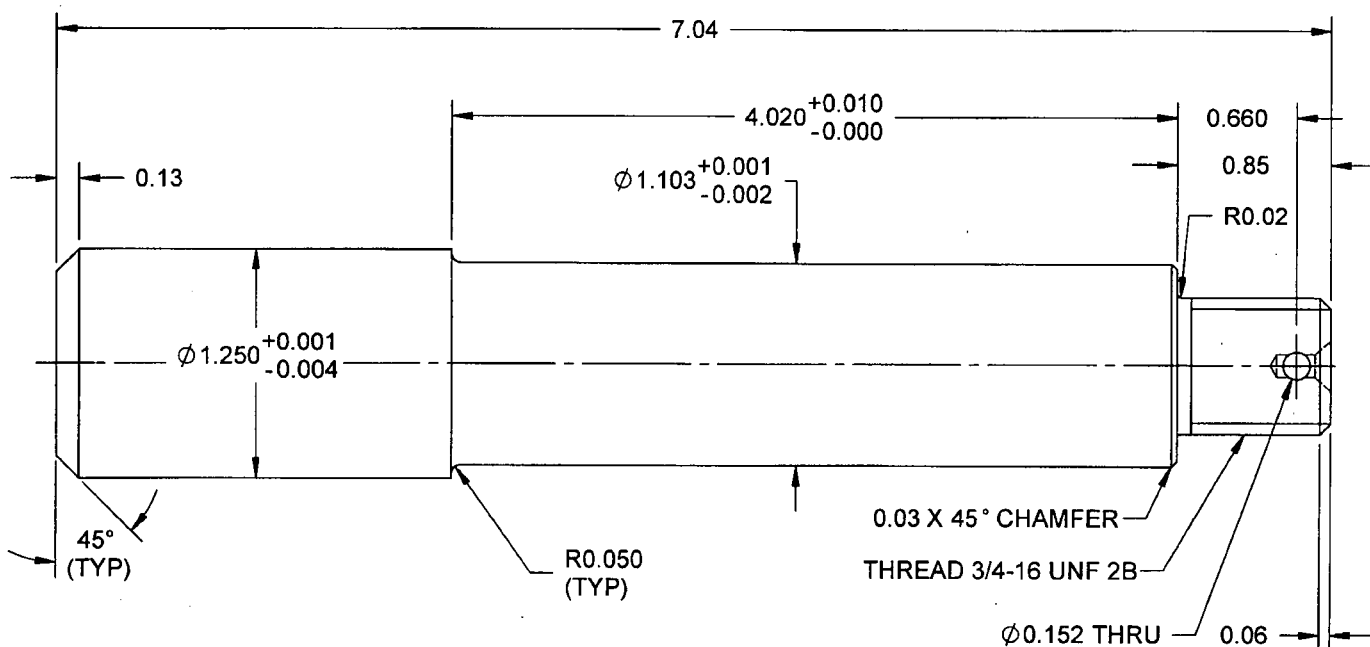
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CHECKED <i>[Signature]</i>	APPROVED <i>[Signature]</i>	DRAWING NO. D3354	REV. C SHEET 4 OF 7
DATE 07.12.06	TITLE LEFT ARM WELDMENT		SCALE 1:1

RELEASED
07.12.07 *[Signature]*



D3354-3 WHEEL SHAFT

NOTES:

- 1) MATERIAL: AISI-4130/ AISI-4140 OR ASTM A304-02/ A-434-BC/ A193-03 - GRADE-B7/ A29-03/ A322-91
OR UNS#-G41400 ROUND BAR, ϕ 1.250 (REF. DART SPEC. M4140H-R)
- 2) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
- 3) ALL DIMENSIONS ARE IN INCHES
- 4) BREAK ALL SHARP EDGES 0.010 TO 0.020

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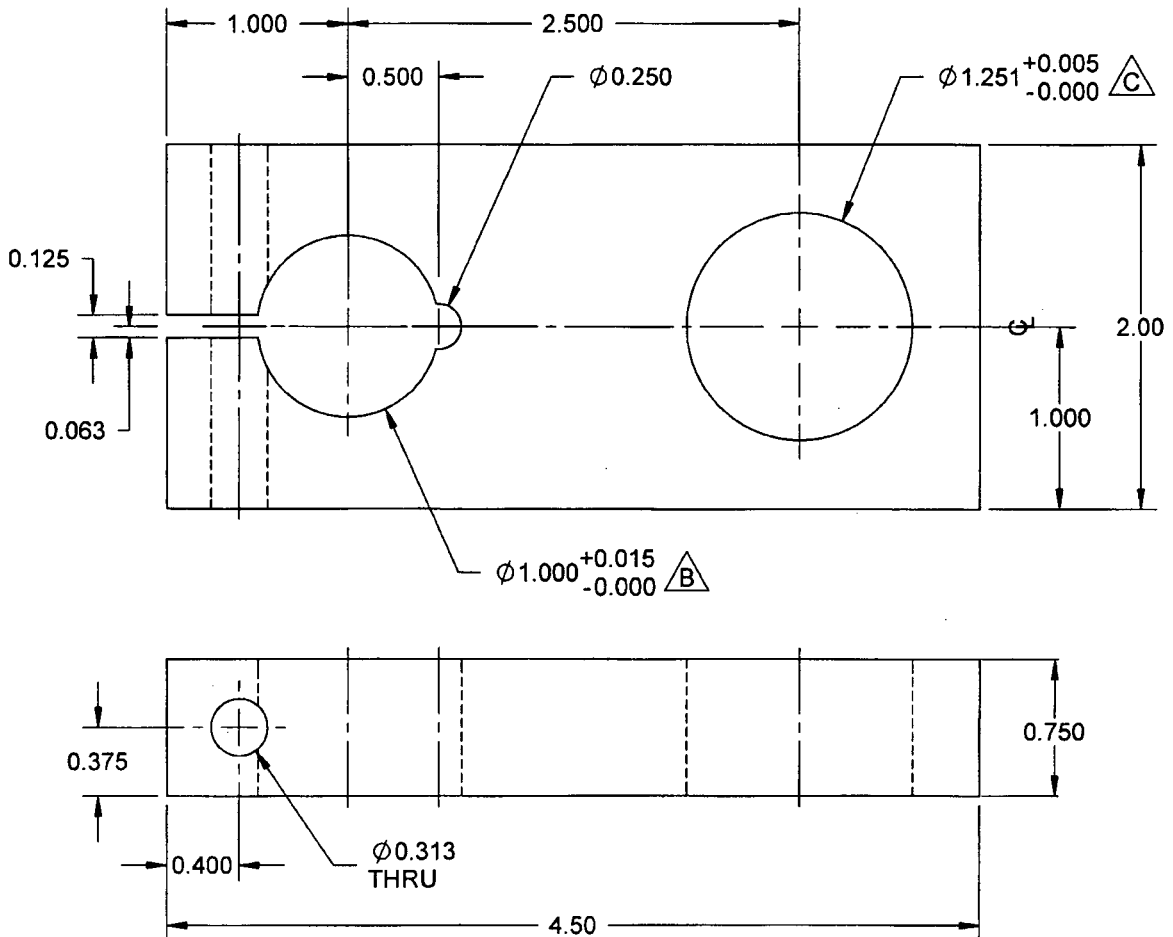
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DATE 07.12.06		TITLE LEFT ARM WELDMENT	SCALE 1:1

RELEASED
07/12/07 *[Signature]*



D3354-5 RIGHT ARM PLATE

NOTES:

- 1) MATERIAL: AISI 1010-1025 OR ASTM A36/A366/A569/A570 OR CSA G40.21, 38W/44W/50W/60W/70W, 0.75 THICK MILD STEEL BAR (REF. DART SPEC. M1010-B)
- 2) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
- 3) ALL DIMENSIONS ARE IN INCHES
- 4) BREAK ALL SHARP EDGES 0.010 TO 0.020

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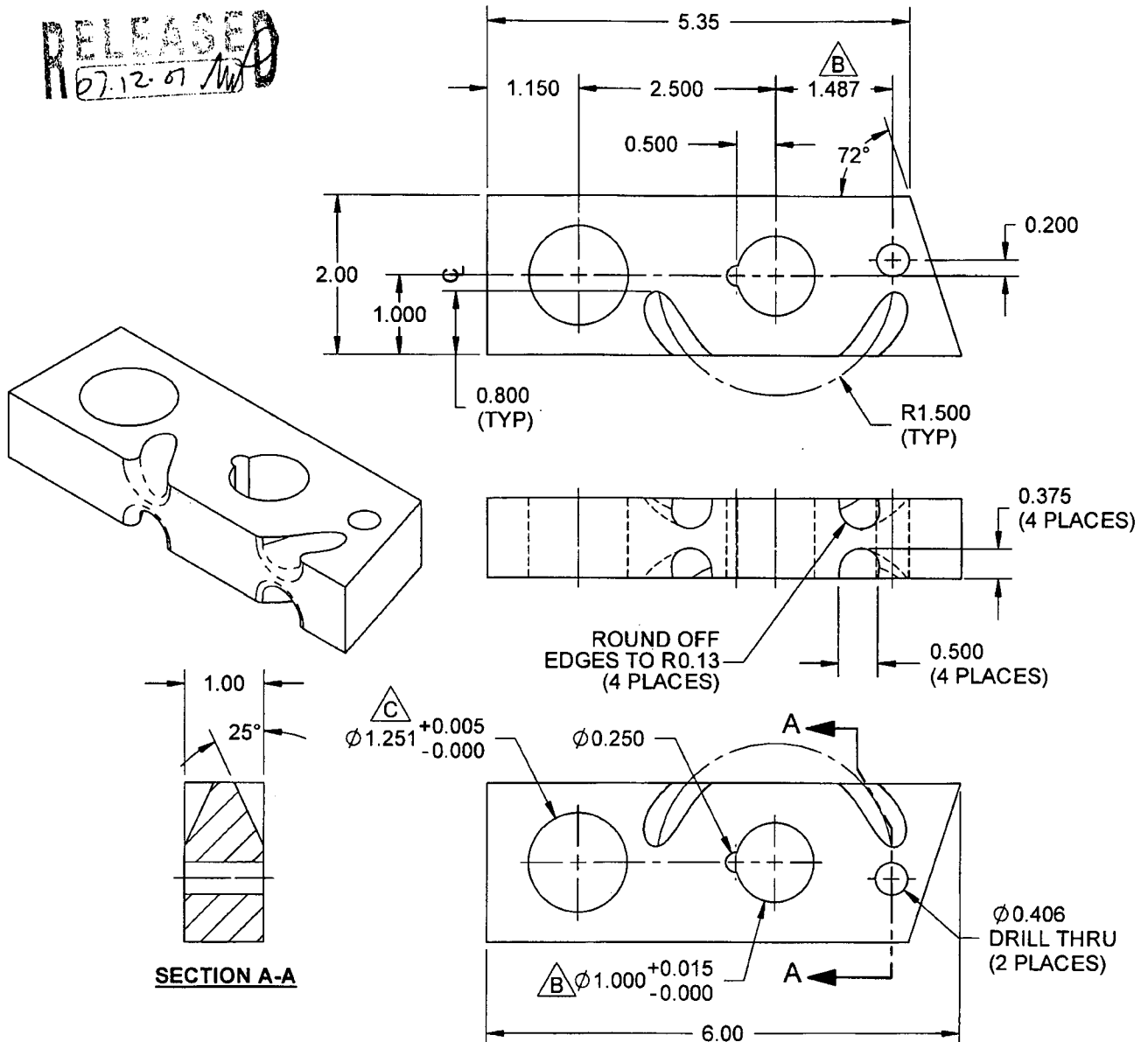
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DART

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DATE 07.12.06		TITLE LEFT ARM WELDMENT	SCALE 1:2

RELEASED
07.12.07 *MM***D3354-7 LEFT ARM PLATE****NOTES:**

- 1) MATERIAL: AISI 1010-1025 OR ASTM A36/A366/A569/A570 OR CSA G40.21, 38W/44W/50W/60W/70W, 1.00 THICK MILD STEEL BAR (REF. DART SPEC. M1010-B)
- 2) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
- 3) ALL DIMENSIONS ARE IN INCHES
- 4) BREAK ALL SHARP EDGES 0.010 TO 0.020

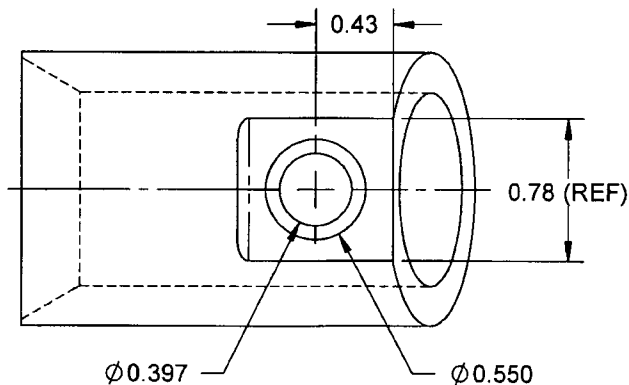
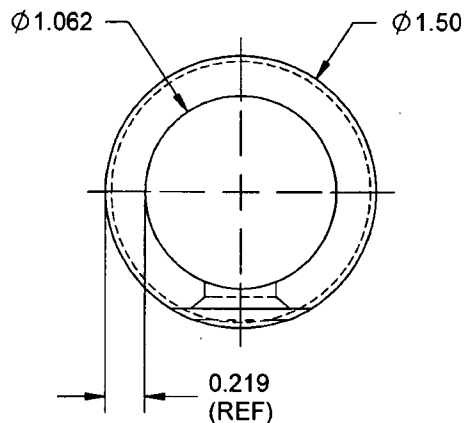
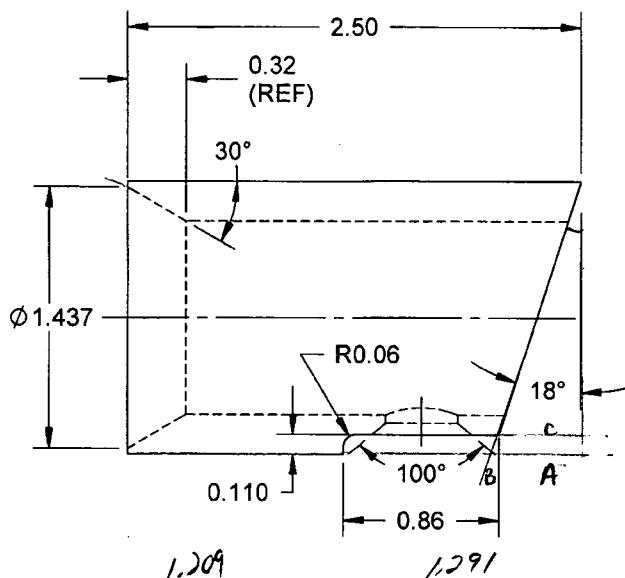
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DATE 07.12.06	TITLE LEFT ARM WELDMENT		SCALE 1:1



$\tan 18^\circ = \frac{A}{1.437}$
 $A = 0.467$
 $\tan 18^\circ = \frac{B}{1.110}$
 $B = 0.35$
 $\tan 18^\circ = \frac{C}{1.327}$
 $C = 0.431$

D3354-9 HANDLE SOCKET

NOTES:

- 1) MATERIAL: AISI 1010-1025 SEAMLESS ROUND TUBING PER MIL-T-5066 OR ASTM A513-00 MT1020 SRA OR AMS 5075 OR AMS 5077 (REF. DART SPEC. M1020TR1.250W.219)
- 2) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
- 3) ALL DIMENSIONS ARE IN INCHES
- 4) BREAK ALL SHARP EDGES 0.010 TO 0.020

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